

MAIN WORKSHEET-BUILD ALTERNATIVE

(Rev. 11, May 2, 2008)

City and County of Honolulu

Today's Date **05/01/09**

Honolulu Rail Transit Project, East Kapolei to Ala Moana Center via Airport

Yr of Base Year \$ FY 2009

Application for P.E.

Yr of Revenue Ops FY 2019

	Quantity	Base Year Dollars w/o Contingency (X000)	Base Year Dollars Allocated Contingency (X000)	Base Year Dollars TOTAL (X000)	Base Year Dollars Unit Cost (X000)	Base Year Dollars Percentage of Construction Cost	Base Year Dollars Percentage of Total Project Cost	YOE Dollars Total (X000)
10 GUIDEWAY & TRACK ELEMENTS (route miles)	20.48	1,124,983	281,246	1,406,228	\$ 68,651	49%	32%	1,647,608
10.01 Guideway: At-grade exclusive right-of-way				0				0
10.02 Guideway: At-grade semi-exclusive (allows cross-traffic)				0				0
10.03 Guideway: At-grade in mixed traffic				0				0
10.04 Guideway: Aerial structure	20.14	986,399	246,600	1,232,999	\$ 61,221			1,444,644
10.05 Guideway: Built-up fill				0				0
10.06 Guideway: Underground cut & cover				0				0
10.07 Guideway: Underground tunnel				0				0
10.08 Guideway: Retained cut or fill	0.34	5,530	1,382	6,912	\$ 20,108			8,099
10.09 Track: Direct fixation		123,389	30,847	154,236				180,711
10.10 Track: Embedded				0				0
10.11 Track: Ballasted				0				0
10.12 Track: Special (switches, turnouts)		9,665	2,416	12,081				14,155
10.13 Track: Vibration and noise dampening				0				0
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	21	244,623	61,156	305,779	\$ 14,561	11%	7%	383,595
20.01 At-grade station, stop, shelter, mall, terminal, platform				0				0
20.02 Aerial station, stop, shelter, mall, terminal, platform	21	186,359	46,590	232,949	\$ 11,093			292,231
20.03 Underground station, stop, shelter, mall, terminal, platform				0				0
20.04 Other stations, landings, terminals: Intermodal, ferry, trolley, etc.				0				0
20.05 Joint development				0				0
20.06 Automobile parking multi-story structure				0				0
20.07 Elevators, escalators		58,264	14,566	72,830				91,364
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS		97,327	24,332	121,659	\$ 5,939	4%	3%	137,304
30.01 Administration Building: Office, sales, storage, revenue counting		16,673	4,168	20,841				23,521
30.02 Light Maintenance Facility				0				0
30.03 Heavy Maintenance Facility		80,654	20,164	100,818				113,783
30.04 Storage or Maintenance of Way Building				0				0
30.05 Yard and Yard Track				0				0
40 SITEWORK & SPECIAL CONDITIONS		575,897	181,727	757,624	\$ 36,987	27%	17%	885,186
40.01 Demolition, Clearing, Earthwork		25,642	8,975	34,617				40,446
40.02 Site Utilities, Utility Relocation		331,900	116,165	448,066				523,507
40.03 Haz. mat'l, contam'd soil removal/mitigation, ground water treatments		10,144	3,550	13,694				16,000
40.04 Environmental mitigation, e.g. wetlands, historic/archeologic, parks		9,840	3,444	13,284				15,521
40.05 Site structures including retaining walls, sound walls				0				0
40.06 Pedestrian / bike access and accommodation, landscaping				0				0
40.07 Automobile, bus, van accessways including roads, parking lots		198,371	49,593	247,964				289,713
40.08 Temporary Facilities and other indirect costs during construction				0				0
50 SYSTEMS		203,429	50,857	254,286	\$ 12,414	9%	6%	311,031
50.01 Train control and signals		34,627	8,657	43,283				52,942
50.02 Traffic signals and crossing protection		24,237	6,059	30,296				37,057
50.03 Traction power supply: substations		42,010	10,503	52,513				64,231
50.04 Traction power distribution: catenary and third rail		68,511	17,128	85,639				104,749
50.05 Communications		20,821	5,205	26,026				31,834
50.06 Fare collection system and equipment		4,364	1,091	5,454				6,672
50.07 Central Control		8,860	2,215	11,075				13,546
Construction Subtotal (10-50)		2,246,259	599,318	2,845,577	\$ 138,919	100%	64%	3,364,725
60 ROW, LAND, EXISTING IMPROVEMENTS		85,283	42,642	127,925	\$ 6,245		3%	117,630
60.01 Purchase or lease of real estate		83,015	41,508	124,523				114,502
60.02 Relocation of existing households and businesses		2,268	1,134	3,402				3,128
70 VEHICLES (number)	67	243,865	58,528	302,393	\$ 4,513		7%	345,624
70.01 Light Rail				0				0
70.02 Heavy Rail	67	217,139	52,114	269,253	\$ 4,019			307,746
70.03 Commuter Rail				0				0
70.04 Bus				0				0
70.05 Other				0				0
70.06 Non-revenue vehicles		5,012	1,203	6,215				7,103
70.07 Spare parts		21,714	5,211	26,925				30,775
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)		591,271	157,755	749,027	\$ 36,567	26%	17%	829,833
80.01 Preliminary Engineering		17,710	4,725	22,435				24,855
80.02 Final Design		99,270	26,486	125,756				139,323
80.03 Project Management for Design and Construction		99,270	26,486	125,756				139,323
80.04 Construction Administration & Management		220,601	58,858	279,459				309,607
80.05 Professional Liability and other Non-Construction Insurance		33,090	8,829	41,919				46,441
80.06 Legal; Permits; Review Fees by other agencies, cities, etc.		33,090	8,829	41,919				46,441
80.07 Surveys, Testing, Investigation, Inspection		11,030	2,943	13,973				15,480
80.08 Start up		77,210	20,600	97,810				108,362
Subtotal (10 - 80)		3,166,679	858,243	4,024,922	\$ 196,493		90%	4,657,812
90 UNALLOCATED CONTINGENCY				242,717			5%	284,398
Subtotal (10 - 90)				4,267,639	\$ 208,343		96%	4,942,210
100 FINANCE CHARGES				194,327			4%	230,873
Total Project Cost (10 - 100)				4,461,965	\$ 217,830		100%	5,173,083
Allocated Contingency as % of Base Yr Dollars w/o Contingency				27.10%				
Unallocated Contingency as % of Base Yr Dollars w/o Contingency				7.66%				
Total Contingency as % of Base Yr Dollars w/o Contingency				34.77%				
Unallocated Contingency as % of Subtotal (10 - 80)				6.03%				
YOE Construction Cost per Mile (X000)								
YOE Total Project Cost per Mile Not Including Vehicles (X000)								
YOE Total Project Cost per Mile (X000)								

INFLATION WORKSHEET

City and County of Honolulu

Honolulu Rail Transit Project, East Kapolei to Ala Moana Center via Airport

Application for P.E.

Insert comments, notes, etc.

BASE YEAR DOLLARS (X\$000)	Base Yr Dollars	Double-Check Total	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
10 GUIDEWAY & TRACK ELEMENTS	1,406,228	1,406,228	25,528	139,068	208,999	385,158	317,078	218,675	102,482	9,240	0	0
20 STATIONS, STOPS, TERMINALS, INTERMODAL	305,779	305,779	0	1,430	27,254	48,482	34,110	38,992	63,032	57,124	35,354	0
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS	121,659	121,659	6,407	29,604	29,685	29,604	26,359	0	0	0	0	0
40 SITEWORK & SPECIAL CONDITIONS	757,624	757,624	9,706	55,152	190,665	286,098	132,734	39,920	29,395	11,267	2,687	0
50 SYSTEMS	254,286	254,286	0	28,664	29,387	29,307	29,307	29,387	29,307	29,307	29,307	20,314
60 ROW, LAND, EXISTING IMPROVEMENTS	127,925	127,925	50,160	44,346	33,419	0	0	0	0	0	0	0
70 VEHICLES	302,393	302,393	0	13,148	4,383	26,295	131,475	127,093	0	0	0	0
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	749,027	749,027	76,718	121,623	93,704	100,795	85,266	68,655	61,425	54,504	52,577	33,758
90 UNALLOCATED CONTINGENCY	242,717	242,717	11,109	26,290	37,107	53,587	44,782	30,972	17,306	9,964	7,501	4,099
100 FINANCE CHARGES	194,327	194,327			557	5,123	17,439	30,907	35,520	36,913	36,912	30,956
Total Project Cost (10 - 100)	4,461,965	4,461,965	179,628	459,325	655,160	964,448	818,551	584,601	338,468	208,319	164,338	89,127
YEAR OF EXPENDITURE DOLLARS (X\$000)	YOE Dollars		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
10 GUIDEWAY & TRACK ELEMENTS	1,647,608		25,589	145,151	229,873	445,779	381,628	273,695	133,386	12,506	0	0
20 STATIONS, STOPS, TERMINALS, INTERMODAL	383,595		0	1,507	29,977	55,903	40,820	48,430	81,253	76,427	49,279	0
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS	137,304		6,557	31,397	32,952	34,491	31,907	0	0	0	0	0
40 SITEWORK & SPECIAL CONDITIONS	885,186		9,938	58,569	212,554	334,679	161,314	50,403	38,558	15,355	3,817	0
50 SYSTEMS	311,031		0	30,092	32,032	33,432	34,654	35,921	37,337	38,597	40,131	28,835
60 ROW, LAND, EXISTING IMPROVEMENTS	117,630		46,766	40,198	30,667	0	0	0	0	0	0	0
70 VEHICLES	345,624		0	13,679	4,698	29,039	149,367	148,841	0	0	0	0
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)	829,833		77,869	125,917	99,243	109,422	94,878	78,304	71,810	65,312	64,578	42,499
90 UNALLOCATED CONTINGENCY	284,398		11,235	27,283	40,813	62,565	53,674	38,136	22,234	12,985	9,961	5,512
100 FINANCE CHARGES	230,873				590	5,561	19,405	35,251	41,525	44,232	45,337	38,972
Total Project Cost (10 - 100)	5,173,083		177,954	473,791	713,400	1,110,872	967,647	708,982	426,104	265,413	213,102	115,819

ANNUALIZED COST-BUILD ALTERNATIVE

(Rev.11, May 2, 2008)

City and County of Honolulu

Today's Date **5/1/09**

Honolulu Rail Transit Project, East Kapolei to Ala Moana Center via Airport

Yr of Base Year \$ **FY 2009**

Application for P.E.

Yr of Revenue Ops **FY 2019**

	Quantity	Total Base Year Dollars (X000)	Cat. 80 Prof. Svc. spread proportionally over Cats. 10 - 50 (X000)	Spread Cat. 90 Unalloc. Cont. according to perceived risks (X000)	Revised Total Base Year Dollars (X000)	Years of Useful Life	Annualization Factor (based on 7% rate) [.07/1 - (1.07) ⁿ - no. yrs]	Annualized Cost (X000)
10 GUIDEWAY & TRACK ELEMENTS (route miles)	20.48	1,406,228	370,154	175,000	1,951,383			139,364
10.01 Guideway: At-grade exclusive right-of-way	0.00	0	0	0	0	125	0.0700	0
10.02 Guideway: At-grade semi-exclusive (allows cross-traffic)	0.00	0	0	0	0	30	0.0806	0
10.03 Guideway: At-grade in mixed traffic	0.00	0	0	0	0	20	0.0944	0
10.04 Guideway: Aerial structure	20.14	1,232,999	324,556	175,000	1,732,555	80	0.0703	121,822
10.05 Guideway: Built-up fill	0.00	0	0	0	0	80	0.0703	0
10.06 Guideway: Underground cut & cover	0.00	0	0	0	0	125	0.0700	0
10.07 Guideway: Underground tunnel	0.00	0	0	0	0	125	0.0700	0
10.08 Guideway: Retained cut or fill	0.34	6,912	1,819	0	8,732	125	0.0700	611
10.09 Track: Direct fixation		154,236	40,599	0	194,835	30	0.0806	15,701
10.10 Track: Embedded		0	0	0	0	20	0.0944	0
10.11 Track: Ballasted		0	0	0	0	35	0.0772	0
10.12 Track: Special (switches, turnouts)		12,081	3,180	0	15,261	30	0.0806	1,230
10.13 Track: Vibration and noise dampening		0	0	0	0	30	0.0806	0
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	21	305,779	80,489	33,000	419,267			30,525
20.01 At-grade station, stop, shelter, mall, terminal, platform	0	0	0	0	0	70	0.0706	0
20.02 Aerial station, stop, shelter, mall, terminal, platform	21	232,949	61,318	33,000	327,267	70	0.0706	23,111
20.03 Underground station, stop, shelter, mall, terminal, platform	0	0	0	0	0	125	0.0700	0
20.04 Other stations, landings, terminals: Intermodal, ferry, trolley, etc.	0	0	0	0	0	70	0.0706	0
20.05 Joint development		0	0	0	0	70	0.0706	0
20.06 Automobile parking multi-story structure		0	0	0	0	50	0.0725	0
20.07 Elevators, escalators		72,830	19,171	0	92,001	30	0.0806	7,414
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS		121,659	32,024	15,000	168,682			12,223
30.01 Administration Building: Office, sales, storage, revenue counting		20,841	5,486	0	26,327	50	0.0725	1,908
30.02 Light Maintenance Facility		0	0	0	0	50	0.0725	0
30.03 Heavy Maintenance Facility		100,818	26,538	15,000	142,355	50	0.0725	10,315
30.04 Storage or Maintenance of Way Building		0	0	0	0	50	0.0725	0
30.05 Yard and Yard Track		0	0	0	0	80	0.0703	0
40 SITEWORK & SPECIAL CONDITIONS		757,624	199,426	18,953	976,003			75,971
40.01 Demolition, Clearing, Earthwork		34,617	9,112	0	43,729	125	0.0700	3,062
40.02 Site Utilities, Utility Relocation		448,066	117,942	0	566,008	125	0.0700	39,629
40.03 Haz. mat'l, contam'd soil removal/mitigation, ground water treatments		13,694	3,605	8,953	26,252	125	0.0700	1,838
40.04 Environmental mitigation, e.g. wetlands, historic/archeologic, parks		13,284	3,497	10,000	26,781	125	0.0700	1,875
40.05 Site structures including retaining walls, sound walls		0	0	0	0	80	0.0703	0
40.06 Pedestrian / bike access and accommodation, landscaping		0	0	0	0	20	0.0944	0
40.07 Automobile, bus, van accessways including roads, parking lots		247,964	65,270	0	313,234	20	0.0944	29,567
40.08 Temporary Facilities and other indirect costs during construction		0	0	0	0	100	0.0701	0
50 SYSTEMS		254,286	66,935	0	321,221			25,837
50.01 Train control and signals		43,283	11,393	0	54,677	30	0.0806	4,406
50.02 Traffic signals and crossing protection		30,296	7,975	0	38,271	30	0.0806	3,084
50.03 Traction power supply: substations		52,513	13,823	0	66,336	50	0.0725	4,807
50.04 Traction power distribution: catenary and third rail		85,639	22,542	0	108,181	30	0.0806	8,718
50.05 Communications		26,026	6,851	0	32,876	20	0.0944	3,103
50.06 Fare collection system and equipment		5,454	1,436	0	6,890	25	0.0858	591
50.07 Central Control		11,075	2,915	0	13,990	30	0.0806	1,127
Construction Subtotal (10 - 50)		2,845,577	749,027	241,953	3,836,556			283,920
60 ROW, LAND, EXISTING IMPROVEMENTS		127,925		0	127,925			8,957
60.01 Purchase or lease of real estate		124,523		0	124,523	125	0.0700	8,718
60.02 Relocation of existing households and businesses		3,402		0	3,402	125	0.0700	238
70 VEHICLES (number)	673	782,610		0	782,610			84,837
70.01 Light Rail	0	0		0	0	25	0.0858	0
70.02 Heavy Rail	85	341,590		0	341,590	25	0.0858	29,312
70.03 Commuter Rail	0	0		0	0	25	0.0858	0
70.04 Bus	588	407,880		0	407,880	12	0.1259	51,353
70.05 Other	0	0		0	0	12	0.1259	0
70.06 Non-revenue vehicles	0	6,215		0	6,215	12	0.1259	782
70.07 Spare parts	0	26,925		0	26,925	12	0.1259	3,390
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)		749,027						
80.01 Preliminary Engineering		22,435						
80.02 Final Design		125,756						
80.03 Project Management for Design and Construction		125,756						
80.04 Construction Administration & Management		279,459						
80.05 Professional Liability and other Non-Construction Insurance		41,919						
80.06 Legal; Permits; Review Fees by other agencies, cities, etc.		41,919						
80.07 Surveys, Testing, Investigation, Inspection		13,973						
80.08 Start up		97,810						
Subtotal (10 - 80)		4,505,138						
90 UNALLOCATED CONTINGENCY		242,717						
Subtotal (10 - 90)		4,747,856	749,027	241,953	4,747,091			377,714
Bus Maintenance Base		25,637		0	25,637	50	0.0725	1,858
Transit Centers		10,300		0	10,300	70	0.0706	727
TOTAL		4,783,792		241,953	4,783,028			380,299

MAIN WORKSHEET - BASELINE ALTERNATIVE

(Rev.11, May 2, 2008)

City and County of Honolulu

Today's Date **5/1/09**

Honolulu Rail Transit Project, East Kapolei to Ala Moana Center via Airport

Yr of Base Year \$ **FY 2009**

Application for P.E.

Yr of Revenue Ops **FY 2019**

	Quantity	Base Year Dollars w/o Contingency (X000)	Base Year Dollars Allocated Contingency (X000)	Base Year Dollars TOTAL (X000)	Base Year Dollars Unit Cost (X000)	Base Year Dollars Percentage of Construction Cost	Base Year Dollars Percentage of Total Project Cost	Baseline Alternative Cost Parameters (X000) see New Starts Reporting Instructions for additional info
10 GUIDEWAY & TRACK ELEMENTS (route miles)	0.00	0	0	0		0%	0%	
10.01 Guideway: At-grade exclusive right-of-way				0				
10.02 Guideway: At-grade semi-exclusive (allows cross-traffic)				0				1082/route mile
10.03 Guideway: At-grade in mixed traffic				0				1082/route mile
10.04 Guideway: Aerial structure				0				
10.05 Guideway: Built-up fill				0				
10.06 Guideway: Underground cut & cover				0				
10.07 Guideway: Underground tunnel				0				
10.08 Guideway: Retained cut or fill				0				
10.09 Track: Direct fixation				0				
10.10 Track: Embedded				0				
10.11 Track: Ballasted				0				
10.12 Track: Special (switches, turnouts)				0				
10.13 Track: Vibration and noise dampening				0				
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	2	0	0	10,300	\$ 5,150	15%	2%	
20.01 At-grade station, stop, shelter, mall, terminal, platform				0				216/station
20.02 Aerial station, stop, shelter, mall, terminal, platform				0				
20.03 Underground station, stop, shelter, mall, terminal, platform				0				
20.04 Other stations, landings, terminals: Intermodal, ferry, trolley, etc.	2			10,300	\$ 5,150			
20.05 Joint development				0				
20.06 Automobile parking multi-story structure				0				
20.07 Elevators, escalators				0				
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS		0	0	35,041		51%	6%	
30.01 Administration Building: Office, sales, storage, revenue counting				0				
30.02 Light Maintenance Facility				35,041				
30.03 Heavy Maintenance Facility				0				
30.04 Storage or Maintenance of Way Building				0				
30.05 Yard and Yard Track				0				
40 SITEWORK & SPECIAL CONDITIONS		0	0	22,795		33%	4%	
40.01 Demolition, Clearing, Earthwork				0				
40.02 Site Utilities, Utility Relocation				0				
40.03 Haz. mat'l, contam'd soil removal/mitigation, ground water treatments				0				
40.04 Environmental mitigation, e.g. wetlands, historic/archeologic, parks				0				
40.05 Site structures including retaining walls, sound walls				0				
40.06 Pedestrian / bike access and accommodation, landscaping				0				
40.07 Automobile, bus, van accessways including roads, parking lots				22,795				5.4/on-grade space
40.08 Temporary Facilities and other indirect costs during construction				0				
50 SYSTEMS		0	0	0		0%	0%	
50.01 Train control and signals				0				
50.02 Traffic signals and crossing protection				0				27/intersection
50.03 Traction power supply: substations				0				
50.04 Traction power distribution: catenary and third rail				0				
50.05 Communications				0				13/bus and 13/sign
50.06 Fare collection system and equipment				0				10.8/bus
50.07 Central Control				0				16.2-27 /bus
Construction Subtotal (10 - 50)		0	0	68,136		100%	12%	
60 ROW, LAND, EXISTING IMPROVEMENTS		0	0	0			0%	
60.01 Purchase or lease of real estate				0				
60.02 Relocation of existing households and businesses				0				
70 VEHICLES (number)	703	0	0	503,500	\$ 716		88%	
70.01 Light Rail				0				
70.02 Heavy Rail				0				
70.03 Commuter Rail				0				
70.04 Bus	703			503,500	\$ 716			433 conventional or 703 articulated bus
70.05 Other				0				
70.06 Non-revenue vehicles				0				
70.07 Spare parts				0				
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)		0	0	0		0%	0%	
80.01 Preliminary Engineering				0				
80.02 Final Design				0				
80.03 Project Management for Design and Construction				0				
80.04 Construction Administration & Management				0				
80.05 Professional Liability and other Non-Construction Insurance				0				
80.06 Legal; Permits; Review Fees by other agencies, cities, etc.				0				
80.07 Surveys, Testing, Investigation, Inspection				0				
80.08 Start up				0				
Subtotal (10 - 80)		0	0	571,636			100%	
90 UNALLOCATED CONTINGENCY							0%	
Subtotal (10 - 90)				571,636			100%	
100 FINANCE CHARGES				NA				
Total Project Cost (10 - 100)				571,636			100%	
Total Base Year Cost per Mile Not Including Vehicles (X000)								
Allocated Contingency as % of Base Yr Dollars w/o Cont.								
Unallocated Contingency as % of Base Yr Dollars w/o Contingency								
Total Contingency as % of Base Yr Dollars w/o Contingency								
Unallocated Contingency as % of Subtotal (10 - 80)								

AR00138319

ANNUALIZED COST-BASELINE ALTERNATIVE

(Rev. 11, May 2, 2008)

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Application for P.E.

Yr of Revenue Ops FY 2019

	Quantity	Total Base Year Dollars (X000)	Cat. 80 Prof. Svc. spread proportionally over Cats. 10 - 50 (X000)	Spread Cat. 90 Unalloc. Cont. according to perceived risks (X000)	Revised Total Base Year Dollars (X000)	Years of Useful Life	Annualization Factor (based on 7% rate) [.07/1 - (1.07)^ no. yrs]	Annualized Cost (X000)
10 GUIDEWAY & TRACK ELEMENTS (route miles)	0.00	0	0	0	0			0
10.01 Guideway: At-grade exclusive right-of-way	0.00	0	0	0	0	125	0.0700	0
10.02 Guideway: At-grade semi-exclusive (allows cross-traffic)	0.00	0	0	0	0	30	0.0806	0
10.03 Guideway: At-grade in mixed traffic	0.00	0	0	0	0	20	0.0944	0
10.04 Guideway: Aerial structure	0.00	0	0	0	0	80	0.0703	0
10.05 Guideway: Built-up fill	0.00	0	0	0	0	80	0.0703	0
10.06 Guideway: Underground cut & cover	0.00	0	0	0	0	125	0.0700	0
10.07 Guideway: Underground tunnel	0.00	0	0	0	0	125	0.0700	0
10.08 Guideway: Retained cut or fill	0.00	0	0	0	0	125	0.0700	0
10.09 Track: Direct fixation		0	0	0	0	30	0.0806	0
10.10 Track: Embedded		0	0	0	0	20	0.0944	0
10.11 Track: Ballasted		0	0	0	0	35	0.0772	0
10.12 Track: Special (switches, turnouts)		0	0	0	0	30	0.0806	0
10.13 Track: Vibration and noise dampening		0	0	0	0	30	0.0806	0
20 STATIONS, STOPS, TERMINALS, INTERMODAL (number)	2	10,300	0	0	10,300			727
20.01 At-grade station, stop, shelter, mall, terminal, platform	0	0	0	0	0	70	0.0706	0
20.02 Aerial station, stop, shelter, mall, terminal, platform	0	0	0	0	0	70	0.0706	0
20.03 Underground station, stop, shelter, mall, terminal, platform	0	0	0	0	0	125	0.0700	0
20.04 Other stations, landings, terminals: Intermodal, ferry, trolley, etc.	2	10,300	0	0	10,300	70	0.0706	727
20.05 Joint development		0	0	0	0	70	0.0706	0
20.06 Automobile parking multi-story structure		0	0	0	0	50	0.0725	0
20.07 Elevators, escalators		0	0	0	0	30	0.0806	0
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS		35,041	0	0	35,041			2,539
30.01 Administration Building: Office, sales, storage, revenue counting		0	0	0	0	50	0.0725	0
30.02 Light Maintenance Facility		35,041	0	0	35,041	50	0.0725	2,539
30.03 Heavy Maintenance Facility		0	0	0	0	50	0.0725	0
30.04 Storage or Maintenance of Way Building		0	0	0	0	50	0.0725	0
30.05 Yard and Yard Track		0	0	0	0	80	0.0703	0
40 SITEWORK & SPECIAL CONDITIONS		22,131	0	0	22,131			2,089
40.01 Demolition, Clearing, Earthwork		0	0	0	0	125	0.0700	0
40.02 Site Utilities, Utility Relocation		0	0	0	0	125	0.0700	0
40.03 Haz. mat'l, contam'd soil removal/mitigation, ground water treatments		0	0	0	0	125	0.0700	0
40.04 Environmental mitigation, e.g. wetlands, historic/archeologic, parks		0	0	0	0	125	0.0700	0
40.05 Site structures including retaining walls, sound walls		0	0	0	0	80	0.0703	0
40.06 Pedestrian / bike access and accommodation, landscaping		0	0	0	0	20	0.0944	0
40.07 Automobile, bus, van accessways including roads, parking lots		22,131	0	0	22,131	20	0.0944	2,089
40.08 Temporary Facilities and other indirect costs during construction		0	0	0	0	100	0.0701	0
50 SYSTEMS		0	0	0	0			0
50.01 Train control and signals		0	0	0	0	30	0.0806	0
50.02 Traffic signals and crossing protection		0	0	0	0	30	0.0806	0
50.03 Traction power supply: substations		0	0	0	0	50	0.0725	0
50.04 Traction power distribution: catenary and third rail		0	0	0	0	30	0.0806	0
50.05 Communications		0	0	0	0	20	0.0944	0
50.06 Fare collection system and equipment		0	0	0	0	25	0.0858	0
50.07 Central Control		0	0	0	0	30	0.0806	0
Construction Subtotal (10 - 50)		67,472	0	0	67,472			5,355
60 ROW, LAND, EXISTING IMPROVEMENTS		0		0	0			0
60.01 Purchase or lease of real estate		0		0	0	125	0.0700	0
60.02 Relocation of existing households and businesses		0		0	0	125	0.0700	0
70 VEHICLES (number)	703	503,500		0	503,500			63,392
70.01 Light Rail	0	0		0	0	25	0.0858	0
70.02 Heavy Rail	0	0		0	0	25	0.0858	0
70.03 Commuter Rail	0	0		0	0	25	0.0858	0
70.04 Bus	703	503,500		0	503,500	12	0.1259	63,392
70.05 Other	0	0		0	0	12	0.1259	0
70.06 Non-revenue vehicles	0	0		0	0	12	0.1259	0
70.07 Spare parts	0	0		0	0	12	0.1259	0
80 PROFESSIONAL SERVICES (applies to Cats. 10-50)		0						
80.01 Preliminary Engineering		0						
80.02 Final Design		0						
80.03 Project Management for Design and Construction		0						
80.04 Construction Administration & Management		0						
80.05 Professional Liability and other Non-Construction Insurance		0						
80.06 Legal; Permits; Review Fees by other agencies, cities, etc.		0						
80.07 Surveys, Testing, Investigation, Inspection		0						
80.08 Start up		0						
Subtotal (10 - 80)		570,972						
90 UNALLOCATED CONTINGENCY		0						
Subtotal (10 - 90)		570,972	0	0	570,972			68,747